UNITED
NATIONS

ST

Secretariat

Distr.
GENERAL

ST/SG/AC.10/C.3/1997/27
25 April 1997

Original : ENGLISH

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the Transport of Dangerous Goods

(Thirteenth session, Geneva, 7-17 July 1997, agenda item 5 (b))

GLOBAL HARMONISATION OF SYSTEMS OF CLASSIFICATION AND LABELLING OF CHEMICALS

Joint ILO/UN Working Group on harmonized classification criteria for flammability and reactivity

Aerosols

Presented by the Chairman of the working group

Aerosols, Definition and criteria for flammability

Aim of document

This document offers guidance on a practical way of proceeding in the discussions to be held on aerosols and the related classification criteria for flammability. The detailed discussion should take place on the basis of documents presented by experts of member states and by other organisations concerned. Those have already been submitted to previous meetings or may be submitted at the forthcoming session.

Starting point

Based on the decisions made in previous meetings of the Joint ILO/UN Working-Group (JWG) and of the UN Sub-Committee and Committee of Experts on the Transport of Dangerous Goods, discussions on the flammability of Aerosols could start with the question of a suitable definition for aerosols and thereafter move on to the criteria and cut-off values for their flammability.

Definition of Aerosols

The following documents from previous discussions have to be taken into consideration:

- ST/SG/AC.10/23/Add.4,
- ST/SG/AC.10/R.509 (Germany),
- ST/AG/AC.10/R.532 (Norway),
- ST/SG/AC.10/R.764 (United Kingdom).

New documents specific to this item:

- ST/SG/AC.10/C.3/1997/30 (Germany), Definition of Aerosols

Three existing definitions have been named and cited in previous discussions:

- definition of the UN-Recommendations, 9th edition, chapter 1.17.1, Note, and Special Provision 190,

- definition in the ICAO Technical Instructions, chapter 2.5.1,

- definition in the Directive 75/324/EEC, as amended by Directive 94/1/EC.

All three definitions deal with Aerosols as Aerosol-dispensers, that is with compressed packaged products to be sprayed for use. In scientific terms the meaning of an aerosol is different. There, aerosol means mixtures of agents (e.g. vapours, mists, dusts, liquids) with air to be considered for their oral intake by people, animals or for application for medical purposes.

As the proposal for a global hamonized set of classifcation criteria should be prepared to be suitable for many protection purposes and should - after acceptance and implementation - be used for different regulatory purposes; this could lead to misunderstandings.

Therefore the JWG is invited to discuss, if for clarification the term **„Aerosol"** should be defined in such a way as to avoid misunderstandings, e.g. in the way to precise the wording of the definition by ***„Aerosol dispensers"*** or by another suitable wording.

For the definition itself the JWG is invited to discuss whether one of the three existing definitions should be taken for the harmonization proposal or whether a merger of all three should be developed. For the latter case delegations are invited to submit working documents in due time.

Furthermore views are requested on whether:

- the definition should also cover *2037 Receptacles, small, containing gas*,

- the limit of 1000 ml should be included (see UN-Recommendations, 9th edition, Special Provision 197),

- the limitation to receptacles, non refillable, should be kept (as modern technologie makes refilling possible e.g. in controlled circumstances, taking into account the need for reduction of wastes and the need for recycling.

In the discussions it could also be checked if the different possible mixtures of contents in aerosol dispensers need specific measures to be taken into account for the harmonization proposal. In particular the following types could appear:

Propellant gas	**Agents**
non flammable gas	non flammable
non flammable gas	flammable solid or mixture(s) of flammable solid(s)
non flammable gas	flammable liquid or solution(s) of flammable liquid(s)
flammable gas	non flammable
flammable gas	flammable solid or mixture(s) of flammable solid(s)
flammable gas	flammable liquid or solution(s) of flammable liquid(s)

Note 1.: Aerosols with toxic or corrosive components could be included in the definition of aerosols due to the pression of the propellant agent; toxic or corrosive properties to be classified according to the future OECD-proposals on toxicity and skin corrosivity.

Note 2.: Oxidising properties could be taken into account when the JWG has agreed on the criteria and cut-off values for Oxidisers.

It is suggested to discuss

- whether the different mixtures should be treated the same way or differently,
- whether there should be a percentage limit, and - if yes - which one,
- whether there should be an additional mass limit,
- whether a test and criteria should be included (e.g. like in ICAO-TI, chapter 2.5.2 or in directive 94/1/EC), or
- whether a combination of both could be suitable.

For Aerosols the purposes of handling, storage, transport and use have to be taken into account as well as consumer protection.

DRAFT

Table 5: Definition for „Aerosols" and criteria for their flammability

((to be developed after discussions))